



**SWP 8/92 PRODUCT ATTRIBUTES AND PERSONAL VALUES:
A REVIEW OF MEANS-END THEORY
AND CONSUMER BEHAVIOUR**

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INTRODUCTION

Observing what consumers buy in the High Street is easy. What is far more complex, however, is the task of explaining why they are buying what they are buying; to attempt to answer the questions, "what exactly do consumers see in products?" and "what do products actually mean to consumers?"

This paper opens by looking back at the economists' theories of the "rational" consumer and contrasts this approach with a contemporary processing model of consumer decision making derived from a cognitive viewpoint, the means-end chain model.

The paper then discusses the nature of means-end theory, the linkages between product attributes, how they are perceived as benefits by consumers and what these benefits deliver in the form of satisfying values or achieving desired end-states of being. In particular, the paper draws on the work of Rokeach (1973) in defining personal values and of Gutman (1982, 1991) and Reynolds et al (1984, 1988) in describing facets of the means-end theory. The laddering technique, which is a method of establishing relationships between the concepts of attributes, consequences and values, resulting in a graphic representation, is then described. The role of price in determining value is discussed in the context of the "rational" consumer and, subsequently, the means-end chain approach to information processing.

The final section of the paper deals with the value to marketers of the means-end model and laddering techniques. In particular, it discusses application of the theory for cross-cultural comparisons within Europe and poses some challenging questions for Euro-brand managers about the nature of pan-European marketing strategies.

THE "RATIONAL" CONSUMER

Historically, theories of consumer behaviour were dominated by economists who believed in the notion of the "rational" consumer who bought because the price was right. It was not until the 1950s that much thought was given to the idea that product attributes other than simply price, might be influencing the purchase decision. Leavitt's findings (1954), for example, led him to suggest that demand curves may not invariably be negatively sloped; price itself may have more than one meaning to consumers and that a higher price may sometimes increase, rather than decrease, readiness to buy. These tentative findings opened the door to the idea of "irrational" consumer behaviour, to use the economists' vocabulary. (From a cognitive point of view, consumer behaviour per se, could not be describe as "irrational". The term is used by economists when non-price product cues have saliency).

The role of price in determining consumer behaviour has been the subject of much research and Olson (1977) presents a succinct overview of the literature in this area. His table (pp.268-269) shows that most of the early research typically examined the effects of price as the only informational cue available to consumers, while the more recent listings tended to consider multiple product cues.

THE COGNITIVE VIEW OF BEHAVIOUR

In attempting to analyse consumer behaviour, the cognitivist maintains that the internal psychological responses, the thought processes and feelings of the consumer, must be analysed to understand the cognitive and affective stages in the purchase decision. The subjective meanings that reflect each person's personal interpretation of the stimuli in question are described as cognitive representations and these are organised as structures of knowledge (Peter and Olson 1990).

In examining this psychological relationship it is first necessary to define the term "product". Doyle (1989) offers the following: "A product is anything which meets the needs of customers". "Product" refers not only to f.m.c.g. but also to financial or retail services and the value of a product can be described as its ability to meet the needs of consumers. Consumer cognitions about products can be viewed as tri-partite:

The product can be perceived as a bundle of attributes or characteristics, e.g. the pen has black ink, the desk is made of wood. Even the simplest products have a few attributes (the pen has black ink, a plastic casing and a ball-point) while complex products (like word processors) have many. Attribute knowledge can be abstract in that it represents intangible, subjective characteristics such as the quality of the ink flow or it can be of a tangible, concrete nature, such as the colour of the plastic casing.

Secondly, as Levitt (1960) was among the first to point out, consumers usually tend to think about products in terms of their consequences and not their attributes. Consequences can be either functional (e.g. pizza satisfies your hunger) or psychosocial in nature (e.g. wearing "Ellesse" ski-wear may make you feel more stylish and something of a trend setter). Desirable consequences are known as benefits and differ from attributes; people receive benefits whereas products offer attributes. The product benefits accrued can have both direct or indirect consequences: having a haircut may make you feel better (direct consequence) and, because you feel better others react more favourably (indirect consequence).

Thirdly, beyond the tangible level at which functional and psychological consequences operate, products can also be interpreted as value satisfiers. These personal values are therefore important life goals that consumers are trying to achieve (e.g. happiness, security, wisdom) which may, in certain instances, be linked to the products or services consumed by the individual.

PERSONAL VALUES

The role of personal values in buyer behaviour was given impetus by Rokeach (1973) who defines value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct". A value system, he argues, is "an enduring organisation of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance". Rokeach identifies eighteen values or end-states although he argues that these values do not guide all behaviours, only that which is related to maintaining and enhancing self-esteem. He classifies values into two types:

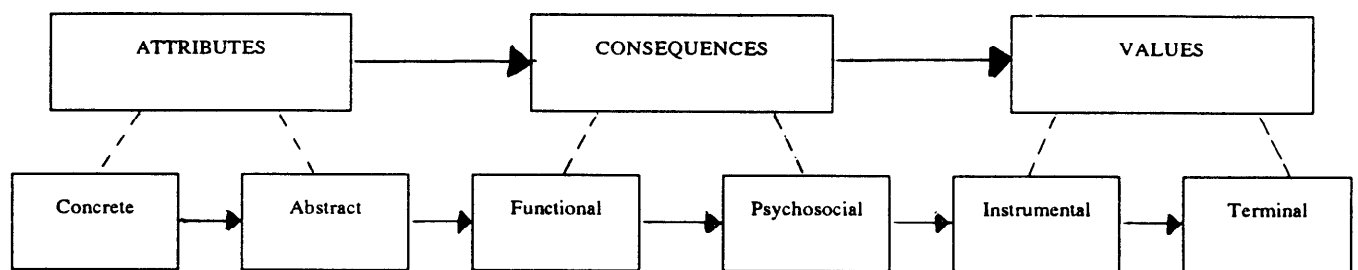
- (i) Terminal values (concerned with preferred end-states of existence);
- (ii) Instrumental values (related to modes of behaviour which are instrumental in achieving those end states).

Based on Rokeach's work, Vinson, Scott and Lamont (1977) defined values as "centrally held cognitive elements that stimulate motivation for behavioural response". They discerned global values and domain-specific values but, as Gutman (1982) points out, they

do not elaborate how these are related to evaluations of product attributes. However, Young and Feigin (1975) through the Grey Benefit Chain, are able to link psychological or emotional benefits to product attributes. In a separate study, Howard (1977) posits a hierarchical evaluative structure of personal values at two levels, one headed by terminal values and the other by instrumental values. Gutman does not draw a distinction in this way.

MEANS-END THEORY AND THE MEANS-END CHAIN

It is means-end theory which enables the researcher to describe how these three levels of knowledge - products as bundles of attributes, as bundles of benefits and as value satisfiers - can be organised to form a simple, associative network. A means-end chain is a simple knowledge structure containing interconnected meanings through which product attributes are seen as means-to-ends or personal values. Embodied in this model is the concept of levels of abstraction; lower-level attributes link with higher-level consequences which, in turn, link with still higher-level values.



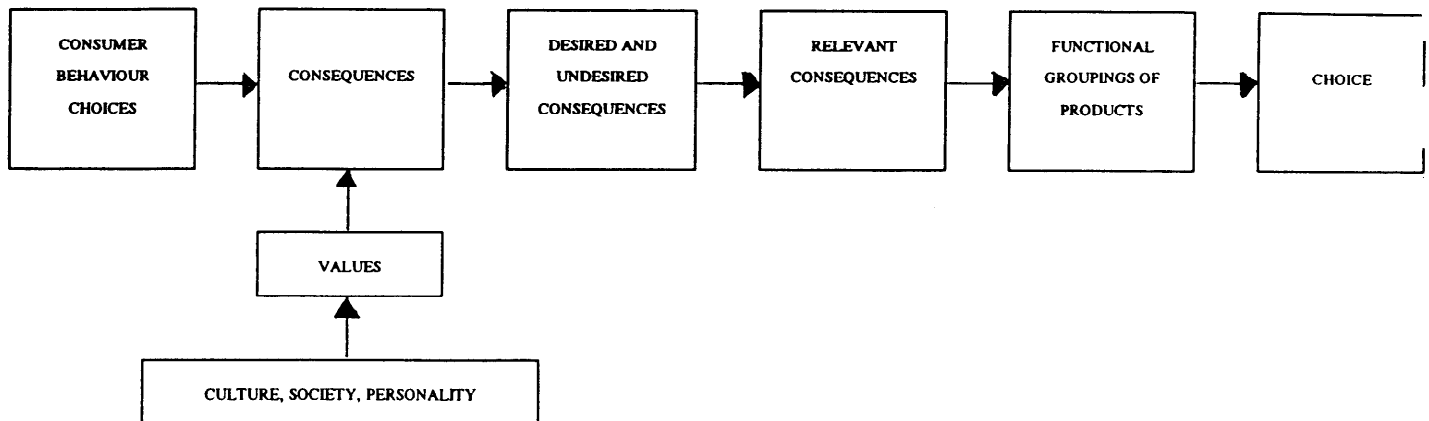
Adapted from Peter and Olson, 1990.

GUTMAN'S MODEL OF MEANS-END CHAINS

Gutman's seminal paper (1982) presents his version of the means-end model based on two assumptions about consumer behaviour:

- (i) Values play a dominant role in guiding choice; consumers choose actions that produce desired consequences and minimise undesired consequences.
- (ii) Consumers reduce the complexity of choice by grouping products into sets or classes. It is this categorisation process which explains how consumers organise their thinking about specific product alternatives, enabling them to treat non-identical stimuli as equivalent. To attain values, consumers group products into different categories depending on which features they emphasise and which they ignore. For example, a consumer may regard the choice of spending an evening in a restaurant, at the cinema, or in a pub as a group of alternative "products" to meet a need for entertainment (terminal value - pleasure). Another consumer might perceive these non-identical stimuli to be non-equivalent because the grouping will be affected by his own personal values. Gutman's chain, therefore, consists of three levels of distinction: values, consequences and groupings (which focus on product attributes).

A Conceptual Model for Means-End Chain: Figure 1



Adapted from Gutman, 1982.

LADDERING AND MEANS-END CHAINS

In order to ascertain consumers' values and their relation to consequences and attributes, Gutman (1982) and Reynolds and Gutman (1984) utilise Repertory Grid and triadic sorting (Kelly 1955) to initiate the process by identifying the perceptual constructs that serve to discriminate among the three stimuli. This is an inherently complex task and clearly some respondents are better able to cope than others. Further, Reynolds and Gutman (1984) argue that Repertory Grid techniques are not sufficient in themselves to push respondents to respond beyond the superficial, descriptive (attribute) level.

In order to elicit higher-level responses, as well as to understand the linkages between the lower-level descriptors and higher-level consequences and values, Reynolds and Gutman use an in-depth probing technique called laddering. Having elicited the perceptual constructs, each of which contains a similarity- and a contrast-component, respondents are then asked to identify which pole of this dichotomous distinction they most prefer and why it is important to them. This, typically, leads to distinctions involving product functions and consequences which result from use of the product. These replies become the basis for still higher-level distinctions and the procedure is repeated until respondents can no longer answer the "why" question. An example of this laddering process is given in appendix I. Laddering can also be used to explore why respondents do not like or use a product and this is known as negative laddering.

Reynolds and Gutman (1984) conclude that, "unlike focus groups, depth interviews or projective techniques, laddering elicits specific responses from respondents that lead directly to qualitative models based on group maps, thereby bridging the gap between qualitative approaches that can't be quantified and the excessively quantitative models that lack depth of meaning".

The analysis of laddering data across respondents involves, firstly, summarising the key elements and then constructing a summary table representing the number of connections between the elements. From this, dominant connections can be graphically represented in a tree diagram which is termed a hierarchical value map (see Appendix II for an example). Not all respondents can produce multi-step ladders. For example, Reynolds and Gutman (1984) quote research in which interviews with 26 respondents produced 133 ladders: 41% of these had only two steps (one beyond the initial response); 38% were three steps in

length and 21% were at least five steps in length. Nevertheless, this result was sufficiently rich to analyse the hierarchical value maps for the product attributes in question.

For a detailed discussion of the theory method, analysis and interpretation, the authors refer the reader to Reynolds and Gutman (1988). In a later paper, Gutman (1991) provides a further commentary on the nature of the linkages between consequences and personal values. He raises a number of challenging questions relating to the process, e.g. in what direction should linkages run? How many elements should be represented in a chain? He also questions whether values are ends or guides; "Do values select consequences or are values implied by consequences?"

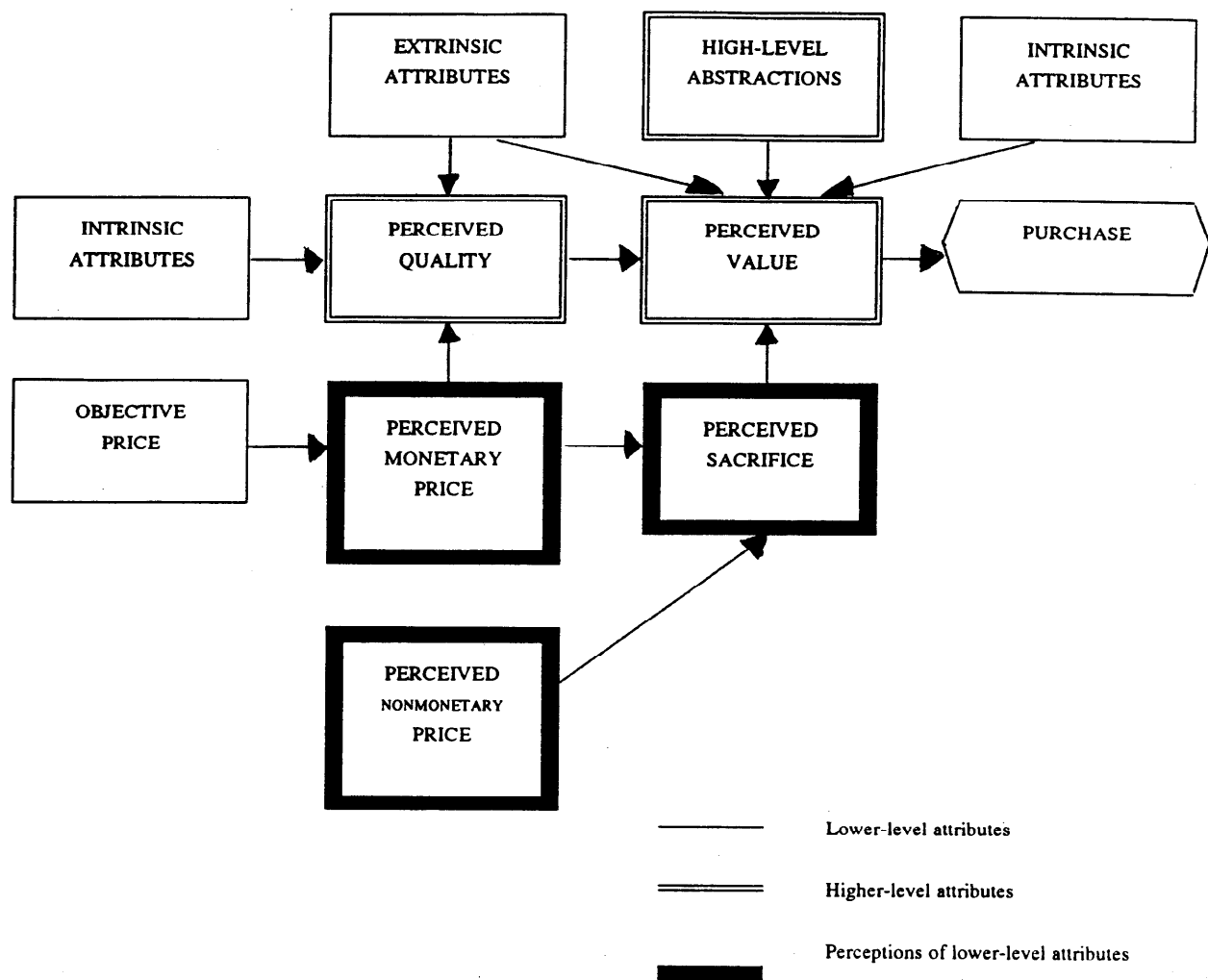
THE INFLUENCE OF SITUATIONAL EFFECTS ON PERSONAL VALUES

Research by Walker and Olson (1991) identifies the importance of situation in consumer decision making. In their study, 40 female subjects were given one of two decision scenarios to buy either a thinking-of-you card or a wedding card. Following laddering procedure, content analysis revealed that the thinking-of-you situation activated receiver-related goals (i.e. to "make her happy") whereas the wedding situation activated receiver-related end goals related to self-expression (i.e. to "express my personality"). The researchers conclude that, if the ends in the means-end chain vary with the situation, then the product-related meanings to which they are connected will also be affected. So the product-related knowledge that consumers consider as choice criteria may change in different decision situations. This point of view is entirely consistent with the conclusion drawn by earlier researchers that the situational influence is a persuasive factor in determining consumer behaviour (Belk 1974, 1975; Gutman 1982).

THE ROLE OF PRICE IN MEANS-END THEORY

Given that this paper opened with the economists' view of price as the pivotal determinant of consumer behaviour, it is interesting to note that in means-end theory the role of price is apparently marginalised; it is described as a lower-level product attribute. In this respect, means-end theory may be thought of as delimiting the role of price considerably. Nonetheless, Zeithaml (1988) uses the means-end model and laddering techniques to propose a model which provides an overview of the relationships between price, perceived quality and perceived value.

Zeithaml posits that there is a distinction between objective price (the actual, monetary price of a product) and perceived price (the price as encoded by the consumer), "Studies have shown that consumers do not always know or remember actual prices of products and, instead, encode them in ways that are meaningful to them". This point has more recently been confirmed by de Chernatony and Knox (1991). Zeithaml argues against including monetary price as a lower level attribute in multi-attribute models because price is a "give" component rather than a "get" component or benefit. Therefore, it is the role of perceived price which should be considered when analysing the role of price in means-end theory.



Adapted from Zeithaml, 1988

MANAGEMENT APPLICATIONS OF MEANS-END THEORY

Means-end theory and the use of the laddering technique enable marketers to gain a better understanding of the benefits gained by consumers from using their products. Management are also able to determine precisely which attributes produce particular benefits and conversely, through negative laddering, why certain product attributes result in negative consequences for consumers. Thus, by understanding the linkages between attributes and benefits, marketers can gain an insight into what their products offer consumers in relation to the competition.

This knowledge can lead to more effective product marketing in a number of ways:

- (i) By enabling market segmentation based on consumer value orientations at the product class or brand level.
- (ii) As a basis for developing advertising strategies. Reynolds and Gutman (1984) claim that means-end chains are the fundamental units of analysis for understanding "image" which can be operationalised through the application of the Means-End

Conceptualization of Components for Advertising Strategy (MECCAs) model devised by Olson and Reynolds (1983).

- (iii) By eliciting the impact of perceived price as an attribute of the product.
- (iv) By highlighting opportunities for new product development. A knowledge of the meaning of attributes will enable n.p.d. marketers to explore the feasibility of new products where the attributes have already been prescribed. Thus, the seller takes his cues from the buyer in such a way that the product becomes a consequence of the marketing effort, not vice versa.

CROSS-CULTURAL VALUES RESEARCH APPLICATION

The fact that differing means-end chains for the same product mix can be aggregated into hierarchical value maps allows for cross-cultural research. Munson (1984) argues that values lie at the heart of cross-cultural marketing research as they serve as the springboard from which cultural norms are derived. It is the intention of the authors to initiate research in this area by selecting a number of European brands and, through the application of the means-end model, to determine their value hierarchy amongst consumers in individual European markets. It is anticipated this will provide some insight into the existence (or otherwise) of the "Euro-consumer" and consequently the effectiveness of a Euro-brand strategy. Does an international market segment, based on values segmentation, exist across national boundaries?

At the marketing mix level, this cross-cultural research will address whether or not a pan-European advertising and pricing strategy is appropriate to local market conditions based on an evaluation and comparison of hierarchical value maps of consumers in the UK and mainland Europe.

SUMMARY

In the context of High Street purchasing, the means-end model can contribute to an understanding of consumer choice decisions. Cognition theory holds that consumers perceive products as bundles of attributes but they do not make a purchase based on these characteristics. A product's attributes are evaluated by consumers in terms of their desirable (or undesirable) consequences, that is, the benefits they may deliver. In making this relationship between attributes and benefits, consumers form hierarchical value structures called means-end chains; it is the notion of value satisfaction derived from product attributes that distinguishes this approach from other behavioural models.

There is not considered to be a direct connection between these values and consumer choice. Instead, the relationship can be determined through a number of intermediate steps or means-end chains. Measurement of the means-end chains can be made through Repertory Grid and subsequent laddering to elicit the higher-level responses and hierarchical value maps. These maps can be aggregated to produce cultural norms for the product in question.

In the context of the Single European Market, means-end theory offers the opportunity to undertake cross-cultural values research of existing European brands and the efficacy of their current strategy as the Single Market evolves.

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APPENDIX I

Hypothetical Example of a Laddering Interview

- Researcher: "You said that being made of softer cloth was important to you in deciding which brand of tracksuit to buy. Why is that?"
- Consumer: "A soft cloth tracksuit will fit me better."
(physical attribute and functional consequence)
- Researcher: "And why is it important that the tracksuit fits you better?"
- Consumer: "Because it feels more comfortable."
(psychosocial consequence)
- Researcher: "And why is it important to you that it feels more comfortable?"
- Consumer: "So I can concentrate on the exercise class."
(psychosocial consequence)
- Researcher: "And why is it important to you that you concentrate on the exercise class?"
- Consumer: "So that I gain the most from the class."
(psychosocial consequence)
- Researcher: "And why is it important to you that you gain the most from the class?"
- Consumer: "Because that way I'll feel good afterwards."
(instrumental value)
- Researcher: "And why is it important to you to feel good afterwards?"
- Consumer: "Because it makes me happy."
(terminal value)
- Researcher: "And why is it important to you to be happy?"
- Consumer: "Because it just is!"
- Researcher: "Thank you."

APPENDIX II

Hypothetical Example of a Hierarchical Value Map

